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DEC 28 FCC 94-141494

# Before the FEDERAL COMMUNICATIONS COMMISSION Washington, DC 20554

In the Matter of	)	
	)	
Reorganization and Revision of	)	
Parts 1, 2, 21, and 94 of	)	WT Docket No. 94-148
the Rules to Establish a New	)	
Part 101 Governing Terrestrial	)	
Microwave Fixed Radio Services	)	

#### NOTICE OF PROPOSED RULEMAKING

Adopted: December 9, 1994; Released: December 28, 1994

Comment Date: February 3, 1995

Reply Comment Date: February 21, 1995

By the Commission:

#### INTRODUCTION

- 1. By this action, the Commission proposes to simplify the rules for the common carrier and private operational fixed services, currently contained respectively in Parts 21 and 94 of the Commission's Rules, and to consolidate those rules into a new Part 101.<sup>1</sup> The key objectives in this Notice of Proposed Rulemaking (Notice) are to restructure the fixed microwave rules so that they are easier for the public to understand and use, to conform similar rule provisions to the maximum extent possible, to eliminate redundancy, and to remove obsolete language. We are also taking this opportunity to review the need for and impact of certain regulatory requirements and policies.
  - 2. Common carrier microwave services and private operational fixed microwave

<sup>&</sup>lt;sup>1</sup> We are not proposing to delete Part 21 in its entirety. As discussed below, the Multipoint Distribution Service Rules will remain in Part 21.

2. Common carrier microwave services and private operational fixed microwave services share many of the same frequency bands and use substantially the same equipment. As a result of recent changes that are discussed below, the interference standards, antenna standards, and coordination procedures for private and common carrier fixed microwave services have further converged. This rulemaking is an effort to conform filing, processing, operational, and technical requirements for services that are technically similar and, thereby, to gain significant economies and alleviate confusion to the public.

# **BACKGROUND**

- 3. Communications services that use the microwave spectrum<sup>2</sup> for fixed services include common carriers (currently regulated by Part 21 of the FCC Rules), common carrier multiple address systems (Part 22)<sup>3</sup>, broadcasters (Part 74), cable TV operators (Part 78), and private operational fixed users (currently regulated by Part 94). The radio frequency spectrum is allocated among these services on either a shared or an exclusive basis. When different service users have similar needs, they are sometimes required to share spectrum bands.
- 4. Of the services listed above, the common carrier and private operational fixed microwave users are the most similar in technical requirements and share the most frequency bands.<sup>4</sup> The convergence of the common carrier and private operational fixed microwave technical standards has occurred over the last decade as a result of several rulemaking proceedings.<sup>5</sup> Recently, a further convergence of these two services occurred as a result of

<sup>&</sup>lt;sup>2</sup> Microwave frequencies are loosely defined as those from about 1 GHz upward. <u>IEEE Standard Dictionary of Electrical and Electronics Terms</u>, (3d ed., F. Jay ed. 1984).

Although there are similar fixed, point-to-multipoint services in both Parts 22 and 94, we are not proposing to move the point-to-multipoint regulations from Part 22 to Part 101 at this time. We are, however, proposing to move the current Part 94 rules, including the rules for point-to-multipoint services to Part 101. We are not proposing any modification of the rules for point-to-multipoint services in this proceeding, although we may propose updating and consolidating those rules in a future proceeding.

<sup>&</sup>lt;sup>4</sup> The other types of services are not considered in this consolidation proceeding due to incompatible technical standards. Broadcasters and cable companies use mainly portable electronic news gathering (ENG) equipment that is technically incompatible with fixed microwave uses typically found in the common carrier and private services. Also not considered in this proceeding are the Instructional Television Fixed Service (ITFS) and the Multipoint Distribution Service (MDS). The ITFS and MDS services differ from the services to be included in Part 101 in terms of policy considerations, applicable rules, and technical standards.

<sup>&</sup>lt;sup>5</sup> See First Report and Order in PR Docket No. 79-337, 81 FCC 2d 140 (1980); Second Report and Order in GEN Docket No. 79-188, 48 Fed. Reg. 50322 (1983); Third Report and Order in GEN Docket No. 82-334, 2 FCC Rcd. 1050, (1987); First Report and Order in GEN Docket No. 82-243, 6 FCC Rcd 4320 (1991); and First Report and Order in PR Docket No. 83-426, 50 Fed. Reg. 13338

the reallocation of five bands above 3 GHz on a co-primary basis to the common carrier and private operational fixed microwave licensees that are relocating from the 1850-1990, 2110-2150, and 2160-2200 MHz bands (2 GHz bands) to accommodate Personal Communications Services (PCS) and other emerging technologies.<sup>6</sup> Although the emerging technologies proceeding resolved all the technical issues necessary for this reallocation, there were other technical matters raised in the proceeding, which were not considered critical to the 2 GHz microwave users' relocation to other regions of the spectrum, that were left to be settled in a future proceeding.<sup>7</sup>

- 5. Also, as a result of the emerging technologies spectrum reallocation and the resulting increase in frequency band-sharing, common carrier and private microwave industry members have united to develop joint interference standards and coordination procedures. For over a year, a subcommittee of the Telecommunications Industry Association's Fixed Point-to-Point Microwave Engineering Committee (TIA TR14.11 Interference Criteria Engineering Subcommittee) has held joint meetings with the National Spectrum Managers Association (NSMA), a group of frequency coordinators for Part 21 applicants, to determine interference criteria for Part 21 and Part 94 users. This collaboration has resulted in a revised TIA Telecommunications Systems Bulletin TSB 10-F, "Interference Criteria for Microwave Systems," (TSB 10-F) which was adopted by the microwave industry on May 31, 1994. Representatives from both the TIA fixed microwave group and the NSMA have met with Commission staff to discuss the benefits of common technical standards, processing procedures, and consolidated rules for common carrier and private operational fixed microwave users.<sup>8</sup>
- 6. Another factor necessitating this proceeding is that the majority of the license application processing for the Part 21 and Part 94 microwave services is now being handled by the Wireless Telecommunications Bureau's Licensing Division in Gettysburg, Pennsylvania. Because the application processing for these services was formerly performed by different Commission offices, the processing practices and policies differed. This proceeding seeks to bring uniformity to the fixed microwave application processing procedures.

(1985).

<sup>&</sup>lt;sup>6</sup> See Second Report and Order in ET Docket No. 92-9, 8 FCC Rcd. 6495 (1993).

<sup>&</sup>lt;sup>7</sup> See id., at 71-72.

<sup>&</sup>lt;sup>8</sup> See Suggested Rule Changes for Merging Part 21 and Part 94 into Part 101, submitted by TIA on April 6, 1994, and letter from Robert J. Miller to Karen Rackley (May 2, 1994).

<sup>&</sup>lt;sup>9</sup> <u>See</u> Public Notice, "New Application Processing Practices in the Common Carrier Point-to-Point Microwave and Broadcast Auxiliary Services," DA 93-77, January 27, 1993.

7. The Part 21 and Part 94 rules need to be consolidated, conformed, and updated to allow the microwave industry to operate as efficiently as possible without being hampered by obsolete regulations. Because of the commonality of major portions of the existing common carrier and private operational fixed microwave rules and the industry move to create common standards and coordination procedures, we believe it would be beneficial to consolidate these rules into one comprehensive part. At the same time, this proceeding provides us with an opportunity to improve the organization of the microwave rules, to simplify them, to eliminate unnecessary language, and to make other substantive amendments. We expect that a new consolidated Part 101 will result in major benefits. First, the public will benefit because of a much simplified and streamlined licensing process. Second, the improvements in processing efficiency will save scarce Commission resources and free staff time to improve service to the public. Third, we expect the proposed rules to encourage more efficient use of the microwave spectrum. Finally, common technical standards for common carrier and private microwave equipment may lead to economies of scale in microwave equipment production and, thus, lower equipment prices to users.

#### **DISCUSSION**

- 8. Proposed Part 101 is approximately 65 percent the volume of the current common carrier and private radio fixed microwave rules. This reduction results from the elimination of repetitive sections such as definitions, application procedures, and processing procedures, the elimination of unnecessary language, and the consolidation of the remaining rules. In the paragraphs below we address the proposed changes for each subpart and section of the rules, other than proposed changes that are editorial in nature or that concern only renumbering of existing rule language. Appendix B, entitled "Cross-Reference Index," shows the disposition of each existing rule in Parts 21 and 94.
- 9. We welcome comments on whether the scope of our consolidation effort is appropriate. We ask that comments identify the subject of their remarks, whenever possible, by citing the proposed section number of a rule (with cross-reference to the old rule as necessary). This identification will expedite and simplify our review of the comments on the many proposals contained in this <u>Notice</u>.

#### General Requirements

10. <u>Definitions</u>. We propose to make minor editorial changes in the definitions where appropriate. In instances where a definition now appears in more than one rule section and is phrased inconsistently, we propose to use the phrasing that we believe to be the most precise. In cases where a definition appears in Part 2 of the Rules as well as in another part, the proposed Part 101 definition adopts the Part 2 definition in order to conform with either the International Telecommunication Convention or the international Radio Regulations. Additionally, we propose to change the name and all relevant terms related to the Private Digital Termination System service to match the name and terms of the identical Common Carrier Digital Electronic Message Service. See proposed Section 101.3.

# **Applications and Licenses**

11. General Application Requirements. We propose to eliminate several application showings that are currently required of common carrier microwave applicants under Part 21 of the rules, but which are not essential for processing these applications. We request comments on each of these proposals. First, we propose to eliminate the financial showing required under §§ 21.13(a)(2) and 21.17. Lack of financing has generally not been a problem in the common carrier services being transferred to Part 101, and we consider a certification of financial ability unnecessary in these services. Second, we propose eliminating the public interest showing required under § 21.13(a)(4). We tentatively conclude that the public interest will generally be served by granting applications in these services that meet all the Commission's other rules and requirements, and that a separate statement from the applicant pursuant to § 21.13(a)(4) is unnecessary. We also note that the Commission can still request a separate public interest showing if this is deemed necessary in any particular case. Third, we propose eliminating the requirement that applicants submit a copy of any franchise or other authorization when such authorizations are required by local law. See § 21.13(f). We request comments on whether we should replace this application showing with a rule, similar to that contained in Part 22 of the rules, stating that applicants must comply with all local franchise or authorization requirements, obtain any local authorizations by the end of the construction period, and notify the Commission if local authorization is denied. See § 22.13(f). Fourth, we propose eliminating showings regarding control over the station, see § 21.13(g), and maintenance procedures, see § 21.15(e). We request comments on whether we should replace these showings with a general rule describing a licensee's responsibilities for maintenance and control of the station and requiring that maintenance contracts must be in writing. See § 22.205. We also request comments on whether we should continue to require the address and telephone number of a maintenance center or person responsible for technical operation, see § 21.15(e)(1) and Item 18 of FCC Form 494 ("Application for New or Modified Microwave Radio Station License Under Part 21"), or whether this requirement is unnecessary and should also be deleted. Fifth, we propose to eliminate the vertical profile sketch, see § 21.15(c), and the site availability showing, see § 21.15(a), as these showings are not necessary for processing and lack of site availability has not been a problem in the common carrier services being transferred to Part 101. Sixth, we request comments on whether the public interest showing currently required of applicants in the Point-to-Point Microwave Radio Service pursuant to § 21.706(a) should be retained or deleted. We also propose to allow electronic filing for all fixed microwave services authorized under Part 101 as is currently allowed for private land mobile applications. 10 See proposed Sections 1.743, 1.913, and 101.37.11 Finally, we request comments on what requirements we should adopt regarding retention or posting of the station license. See e.g. §§

<sup>&</sup>lt;sup>10</sup> See Order, "In the Matter of Amendment of the Commission's Rules to Modify Signature Requirement for License Applications in the Private Radio Services," 8 FCC Rcd. 2662 (1993).

In a separate proceeding, the Commission proposed to allow Common Carrier Fixed Point-to-Point stations to begin construction upon filing of a license application, as long as certain conditions are met. Notice of Proposed Rulemaking, CC Docket No. 93-2, 8 FCC Rcd. 1112 (1993). This would allow the Common Carrier Point-to-Point Microwave Service benefits similar to those currently available to the private fixed microwave service. We are not duplicating the proposals of CC Docket No. 93-2 as we expect to complete that proceeding soon.

21.201, 22.201, and 94.107.

- 12. Licensee Qualifications and Consummation of Assignments and Transfers. Under Part 21, applicants and licensees are currently required to provide ownership and character information on FCC Form 430 ("Licensee Qualification Report"), see § 21.11(a), and to disclose the real party in interest behind the application pursuant to § 21.13(a)(1). See also § 21.305. We request comment on precisely what ownership (including partnership) and character information we should continue to require of common carrier applicants and licensees under the new Part 101. In addition, under § 21.11(d), (e), and (f), applicants are required to complete assignments or transfers of control within 45 days of the date of authorization and to notify the Commission within 10 days of consummation. In the common carrier services being transferred to Part 101, applicants frequently request extensions of time to complete assignments or transfers. Such requests are routinely granted. Based on this experience, we request comment on whether the time for consummation of assignments and transfers should be extended to 360 days or longer, or whether applicants should be allowed merely to notify the Commission of failure to consummate, rather than requiring applicants to file, and the Commission to grant, repeated extension requests. We also propose to eliminate the requirement for common carriers to notify the Commission within 10 days of consummation.
- 13. Commencing Operation. With regard to the requirement for stations to be placed in operation within a certain period after the date of grant, it has been common practice among some applicants to request and obtain a modification of their license and thereby obtain additional time within which to be in operation. Some applicants repeated this procedure several times, thereby extending their operational deadline far beyond the period contemplated by the rules. In response to these perceived abuses, the Commission's Private Radio Bureau Licensing Division issued a Public Notice<sup>12</sup> clarifying that a station must be placed in operation within the time required by current § 94.51 irrespective of whether the licensee had been granted an amendment to its station authorization. We propose to codify this longstanding interpretation of our rule. See proposed Section 101.63.
- 14. Although current § 94.51 requires that private fixed microwave stations be placed in operation within a time certain, it does not define what constitutes operation for purposes of the rules. In the past, several applicants have argued that the transmission of color bars<sup>13</sup> or other types of strictly test signals satisfies the rule's requirement of being in operation. This interpretation has been uniformly rejected by the staff. Applicants have also argued that the § 94.51 requirement of being in operation is satisfied as long as the station is simply capable of transmitting intelligence. The staff, however, has consistently informed the public

Public Notice, "Construction Requirement for Stations in the Private Operational Fixed Microwave Radio Service," Mimeo No. 4693, May 21, 1985. The functions of the Private Radio Bureau are now the responsibility of the Wireless Telecommunications Bureau.

Color bars are a series of contiguous rectangles or patterns, each a different color. They are transmitted primarily for the purpose of testing and adjusting a television signal to ensure that the transmission path is functioning correctly.

that the mere capability of transmission does not satisfy the requirement of being in operation. We are proposing in Section 101.67(d) to make it clear that only the transmission of operational signals is sufficient to satisfy the "in operation" requirement and that neither the capability of transmission nor the transmission of color bars or similar test signals satisfies the requirement to be in operation. We are proposing to apply this requirement to both private and common carrier fixed microwave users, as the underlying basis for this proposal, efficient spectrum usage, applies equally to both groups. We request comment on whether this requirement is necessary or applicable for common carrier licensees under proposed Part 101.

#### **Technical Standards**

- 15. Frequency Availability Chart. A new frequency availability chart has been placed in the proposed rules (proposed Section 101.101) for the convenience of licensees and applicants. In addition to showing the frequency availability for private and common carrier users, it also shows other services, such as broadcast, cable, PCS, MDS, and ITFS, that share the same bands. More specific technical information for the common carrier and private microwave services are contained in rule Subparts G through J.
- Order in ET Docket 92-9, the Commission adopted the current Part 21 coordination procedures and the current Part 94 interference standards for the relocated common carrier and private operational fixed microwave users. As stated above and in the Second Report and Order, the common carrier and private microwave industry members have united to develop joint interference standards and coordination procedures. We propose, therefore, to apply the same coordination procedures and interference standards to all bands for both private and common carrier fixed microwave services. In addition, we propose to modify the present coordination procedures and interference protection standards to be consistent with the TIA industry standards. See proposed Sections 101.103 and 101.105.
- 17. Transmitter Power Limitations. In addition to merging the transmitter power table from Parts 21 and 94, we also propose to eliminate the values for maximum allowable transmitter power, while retaining the values for Equivalent Isotropic Radiated Power (EIRP). See proposed Section 101.113. We are proposing to allow a maximum EIRP of + 55 dBW for all point-to-point microwave bands from 4 GHz to 40 GHz, to allow for increased path reliability on long paths and to set a common standard for all bands. See proposed Section 101.113. This proposal is based partly on TIA recommendations. Comsearch also proposed a maximum allowable EIRP of +55 dBW in an earlier proceeding. Comsearch points out that in Part 25 of the Rules, the terrestrial station EIRP used to determine frequency coordination distance in the 4, 6, and 11 GHz bands is +55 dBW, which

<sup>&</sup>lt;sup>14</sup> See Second Report and Order in ET Docket No. 92-9, supra note 6, at 58-60.

<sup>&</sup>lt;sup>15</sup> See Suggested Rule Changes, supra note 8.

corresponds with the International Telecommunications (ITU) Radio Rules and Regulations. <sup>16</sup> The Commission decided not to act on that portion of Comsearch's petition, instead deferring consideration of maximum authorized power, antenna standards, and ATPC to a future proceeding. <sup>17</sup> We seek comment on whether increasing the transmitter power limitations as proposed would have any negative impact on any radio users.

- 18. Automatic Transmitter Power Control. ATPC is a feature of digital microwave radio that automatically adjusts transmitter output power based on path fading detected at the far-end receiver(s). 18 In the emerging technologies/relocation proceeding, commenters proposed that ATPC should be explicitly authorized in the rules. <sup>19</sup> In response, the Commission clarified in the rules that ATPC is permitted up to a 3 dB increase in power and encouraged industry groups to explore in greater detail under what circumstances ATPC should be authorized and whether a greater increase in power than 3 dB would be appropriate.<sup>20</sup> We have reviewed the ATPC guidelines in TSB 10-F and are still uncertain of the necessity of including explicit provisions for its use in the rules. We seek comment on whether it is necessary to have TIA's recommendations for ATPC implementation included in our Rules. TSB 10-F contains provisions for up to three different power level specifications: maximum transmit power, coordinated transmit power, and nominal transmit power. We also seek comment on how these recommendations for ATPC should be implemented under our current licensing scheme, which authorizes only a single operating power level on each license, with that power being the one used in the coordination process. If the use of ATPC as described in TSB 10-F were to be permitted, what changes would the Commission have to make to its forms, licenses, and data base?
- 19. Antenna Standards. All antenna standards for Part 101 services have been consolidated into one rule section (proposed section 101.115). Few substantive changes to the antenna standards are proposed. In the Docket 92-9 proceeding, commenting parties raised concerns about our existing antenna standards, stating that the category A standards should be updated and that a new detailed definition of congested areas should be specified to maximize efficiency and permit full use of available bands.<sup>21</sup> The Commission does not have sufficient information at this time to propose specific changes to these standards.

<sup>&</sup>lt;sup>16</sup> See Petition for Clarification or Partial Reconsideration in ET Docket 92-9 filed by Comsearch on October 22, 1993.

<sup>&</sup>lt;sup>17</sup> See Memorandum Opinion and Order in ET Docket 92-9, 9 FCC Rcd. 1943, at 29.

<sup>&</sup>lt;sup>18</sup> See Section 4.3 of TSB 10-F for a detailed explanation of ATPC.

<sup>&</sup>lt;sup>19</sup> See Second Report and Order in ET Docket No. 92-9, supra note 6, at 68-70.

<sup>&</sup>lt;sup>20</sup> <u>Id</u>.

<sup>&</sup>lt;sup>21</sup> See id. at 64.

# **Developmental Authorizations**

20. We propose to eliminate the general requirement that applicants report on any patents applied for as a result of a developmental authorization. This information is in the public domain when the patent is granted, and our requirement is, therefore, duplicative. We also propose to modify the language concerning the confidentiality of developmental reports to make it consistent with our general rules on requests for confidentiality.<sup>22</sup> The consolidated rules continue the prohibition on providing service for hire with a developmental grant now placed on common carriers and extends the prohibition against commercial operation of a developmental grant to private radio operators.

#### **CONCLUSION**

21. In this Notice, we have proposed to amend the regulations for the common carrier and private operational fixed microwave services by consolidating and simplifying their present rule parts, contained respectively in Parts 21 and 94 of the Commission's Rules, to create a new Part 101. Our specific proposals are contained in the rules appendix. We solicit comment on them. We also invite comment on any additional changes that can make the Commission's microwave rules more "user friendly" and help the staff provide improved service to the public.

#### PROCEDURAL MATTERS

22. <u>Initial Regulatory Flexibility Analysis</u>. Pursuant to the Regulatory Flexibility Act of 1980, the Commission finds as follows:

#### A. Reason for Action

This rulemaking proceeding is initiated to obtain comment regarding consolidation and simplification of the microwave rules now contained in Parts 21 and 94 of Title 47 of the Code of Federal Regulations.

#### **B.** Objectives

This action would reduce redundancy now contained in the rules and remove obsolete rules and language. It would also simplify and clarify the requirements for filing license and other authorization applications, the processing of applications and other requests, and the operation of common carrier and private operational fixed microwave stations.

<sup>&</sup>lt;sup>22</sup> See Section 0.459, 47 C.F.R. § 0.459.

### C. Legal Basis

The proposed action is authorized by Sections 4(i) and 303(r) of the Communications Act of 1934, as amended, 47 U.S.C. §§ 154(i) and 303(r).

### D. Description, Potential Impact, and Number of Small Entities Affected

This reorganization and revision of the common carrier and private operational fixed microwave rules will reduce the volume of the rules by approximately 25 percent and make them easier to use and understand. Both the reduction in volume and consolidation of the rules should improve their usefulness as they will be more easily understood by, and save research time for, the public. The benefits would accrue to all interested parties, large and small entities alike. We invite specific comment by interested parties on the likely magnitude of the impact on small radio manufactures and suppliers.

### E. Reporting, Record Keeping, and Other Compliance Requirements

There should be an overall decrease in reporting, record keeping, and other compliance requirements. The use of electronic filing alone should greatly reduce the amount of paperwork required to be filed and increase speed of service.

# F. Federal Rules that Overlap, Duplicate or Conflict with these Rules

None.

# G. Significant Alternatives Minimizing Impact on Small Entities Consistent with Stated Objectives

The objective of this proceeding is to minimize confusion, research time, record keeping and recording for users of microwave radio frequencies. We are unaware of other alternatives that would be as desirable. We solicit comments on this point.

- 23. Other Matters. This is a non-restricted notice and comment rulemaking proceeding. Ex parte presentations are permitted, provided they are disclosed as provided in the Commission's rules. See generally 47 C.F.R. §§ 1.1202, 1.1203, and 1.1206(a).
- 24. This action is taken pursuant to Section 4(i) and 303(r) of the Communications Act of 1934, as amended, 47 U.S.C. Sections 154(i) and 303(r).
- 25. Pursuant to applicable procedures set forth in Sections 1.415 and 1.419 of the Commission's Rules, interested parties may file comments on or before #/February 3, 1995/#, and reply comments on or before #/February 21, 1995/#. All relevant and timely comments will be considered by the Commission before final action is taken in this proceeding. To file formally in this proceeding, participants must file an original

and four copies of all comments, reply comments, and supporting comments. If participants want each Commissioner to receive a personal copy of their comments, an original plus nine copies must be filed. Comments and reply comments should be sent to Office of the Secretary, Federal Communications Commission, Washington, D.C. 20554. Comments and reply comments will be available for public inspection during regular business hours in the Reference Center (Room 239) of the Federal Communications Commission, 1919 M Street, N.W., Washington D.C. 20554.

26. For further information concerning this rulemaking contact Robert James, (202) 634-1706, Wireless Telecommunications Bureau, Federal Communications Commission, Washington, D.C. 20554.

FEDERAL COMMUNICATIONS COMMISSION

William F. Caton

# <u>APPENDIX A - PROPOSED RULE CHANGES</u>

I. PART 1 of Chapter 1 of Title 47 of the Code of Federal Regulations is proposed to be amended as follows:

#### PART 1 - PRACTICE AND PROCEDURE

1. The authority citation for Part 1 continues to read as follows:

Authority: Secs. 4, 303, 48 Stat. 1066, 1082, as amended; 47 U.S.C. 154, 303; Implement, 5 U.S.C. 552 and 21 U.S.C. 853a, unless otherwise noted.

- 2. Section 1.77 is amended by adding a new paragraph (i) to read as follows:
- § 1.77 Detailed application procedures; cross references

\*\*\*\*

- (i) Rules governing applications for authorizations in the Common Carrier and Private Radio terrestrial microwave services are set out in Part 101.

3. Section 1.741 is amended by revising it to read as follows:

# § 1.741 Scope

The general rules relating to applications contained in §§ 1.742 through 1.748 apply to all applications filed by carriers except those filed by public correspondence radio stations pursuant to Parts 80, 87, and 101 of this chapter, and those filed by common carriers pursuant to Part 25 of this chapter. Parts 21 and 101 contain general rules applicable to applications filed pursuant to these Parts. For general rules applicable to applications filed pursuant to Part 80 and 87, see such parts and Subpart F of this part. For rules applicable to applications filed pursuant to Part 25, see said part.

4. Section 1.743 is amended by revising paragraph (a) and adding a new paragraph (e) to read as follows:

#### § 1.743 Who may sign applications.

(a) Except as provided in paragraph (b) of this section, applications, amendments thereto, and related statements of fact required by the Commission must be signed by the applicant, if the applicant is an individual; by one of the partners, if the applicant is a partnership; by an officer or duly authorized employee, if the applicant is a corporation; or by a member who is an officer, if the applicant is an unincorporated association. Applicants, amendments, and related statements of fact filed on behalf of eligible government entities, such as states and territories of the United States and political subdivisions thereof, the District of Columbia, and units of local government, including incorporated municipalities, must be signed by such duly elected or appointed officials as may be competent to do so under the laws of the applicable jurisdiction.

- (e) "Signed," as used in this section, means an original hand-written signature, except that by public notice in the *Federal Register* the Commission may allow signature by any symbol executed or adopted by the applicant with the intent that such symbol be a signature, including symbols formed by computer-generated electronic impulses.
  - 5. Section 1.761 is amended by revising it to read as follows:

#### § 1.761 Cross reference

Specific types of applications under Title III of the Communications Act involving public correspondence radio stations are specified in Parts 23, 80, 87, and 101 of this chapter.

\* \* \* \* \*

- 6. Section 1.825 is amended by revising paragraph (b) to read as follows:
- § 1.825 Random selection procedures for Digital Electronic Message Service.

\* \* \* \* \*

- (b) Petitions to deny applications for digital electronic message service authorizations, and responsive pleadings, shall be filed prior to conducting the random selection, pursuant to the requirements of § 101.43. Following the random selection, petitions against tentative selectee's applications shall be resolved by the Commission.
  - 7. Section 1.901 is amended by revising it to read as follows:
  - § 1.901 Scope.

In the case of any conflict between the rules set forth in this subpart and the rules set forth in part 13 or the rules set forth for specific services in parts 80 through 101, the rules in this subpart shall govern.

- 8. Section 1.924 is amended by revising paragraph (b)(2)(ii) to read as follows:
- § 1.924 Assignment or transfer of control, voluntary and involuntary.

(b)(2)(i) \* \* \*

(b)(2)(ii) FCC Form 402. For assignment of station authorizations in the Private Operational Fixed Microwave Service (Part 101 of this chapter). Attached thereto shall be an executed Form 1046 or a signed letter from proposed assignor stating the assignor's desire to assign the current authorization in accordance with the rules governing the particular service involved.

(b)(2)(iii) \* \* \*

- 9. Section 1.926 is amended by revising paragraph (a)(6) to read as follows:
- § 1.926 Application for renewal of license.

(a)(6) Renewal of station authorizations in the Private Operational Fixed Microwave Service (Part 101 of this chapter) shall be submitted on such form as the Commission may designate by the public notice in accordance with the provisions of § 101.13 of this chapter.

\* \* \* \* \*

10. Section 1.972 is amended by revising paragraphs (a)(1) and (c) to read as follows:

#### § 1.972 Grants by random selection.

(a) \* \* \*

(1) For stations in the following Private Radio Services:

Part 80-Stations in the Maritime Services

Part 87-Aviation Services

Part 90-Private Land Mobile Services

Part 95-Subpart F-Personal Radio Services

Part 101-Subpart H-Private Operational Fixed Microwave Service.

(b) \* \* \*

(c) If there are mutually exclusive applications for an initial license for stations subject to Part 80 or Part 87, or if there are more applications for an initial license in Part 90, Part 95-Subpart F, or Part 101- Subpart H, than can be accommodated on available frequencies, the Commission may process the applications pursuant to a system of random selection. Each such random selection shall be conducted pursuant to an order issued by the Private Radio Bureau and under the direction of the Chief of the Bureau.

\* \* \* \* \*

II. Part 2 of Chapter 1 of Title 47 of the Code of Federal Regulations is amended as follows:

# PART 2 - Frequency Allocations and Radio Treaty Matters; General Rules and Regulations

1. The authority citation for Part 2 continues to read as follows:

Authority: Sec. 4, 302, 303, and 307 of the Communications Act of 1934, as amended, 47 U.S.C Sections 154, 302, 303, and 307, unless otherwise noted.

- 2. Section 2.995 is amended by revising paragraph (a)(2) to read as follows:
- § 2.995 Measurements required: Frequency stability.

\*\*\*\*

(a)(2) From -20° to +50° centigrade for equipment to be licensed for use in the Maritime Services under Part 80 of this chapter, except Class A, B, and S Emergency Position Indicating

Radiobeacons (EPIRBS), and equipment to be licensed for use above 952 MHz at operational fixed stations in all services, stations in the Local Television Transmission Service and Point-to-Point Microwave Radio Service under Part 101 of this chapter, and equipment licensed for use aboard aircraft in the Aviation Services under Part 87 of this chapter.

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III. Part 21 of Chapter 1 of Title 47 of the Code of Federal Regulations is amended as follows:

#### PART 21 - DOMESTIC PUBLIC FIXED RADIO SERVICES

1. The authority citation for Part 21 continues to read as follows:

AUTHORITY Secs. 1, 2, 4, 201-205, 208, 215, 218, 303, 307, 313, 314, 403, 404, 410, 602; 48 Stat. as amended, 1064, 1066, 1070-1073, 1076, 1077, 1080, 1082, 1083, 1087, 1094, 1098, 1102; 47 U.S.C. 151, 154, 201-205, 208, 215, 218, 303, 307, 313, 314, 403, 404, 602; 47 U.S.C. 552.

2. Section 21.2 is amended to read as follows:

#### § 21.2 Definitions.

As used in this part:

Antenna power gain. The square of the ratio of the root-mean-square free space field intensity produced at one mile in the horizontal plane, in millivolts per meter for one kilowatt antenna input power to 137.6 mV/m. This ratio should be expressed in decibels (dB). (If specified for a particular direction, antenna power gain is based on the field strength in that direction only.)

Antenna power input. The radio frequency peak or RMS power, as the case may be, supplied to the antenna from the antenna transmission line and its associated impedance matching network.

Antenna structures. The antenna, its supporting structure and anything attached to it.

Assigned frequency. The frequency coinciding with the center of the radio frequency channel in which the station is authorized to work. This frequency does not necessarily correspond to any frequency in an emission.

<u>Authorized bandwidth.</u> The maximum width of the band of frequencies permitted to be used by a station. This is normally considered to be the necessary or occupied bandwidth, whichever is greater.

<u>Authorized frequency</u>. The frequency assigned to a station by the Commission and specified in the instrument of authorization.

<u>Authorized power.</u> The maximum power a station is permitted to use. This power is specified by the Commission in the station's authorization.

<u>Bandwidth occupied by an emission.</u> The band of frequencies comprising 99 percent of the total radiated power extended to include any discrete frequency on which the power is at least 0.25 percent of the total radiated power.

Bit rate. The rate of transmission of information in binary (two state) form in bits per unit time. Carrier. In a frequency stabilized system, the sinusoidal component of a modulated wave whose frequency is independent of the modulating wave; or the output of a transmitter when the modulating wave is made zero; or a wave generated at a point in the transmitting system and subsequently modulated by the signal; or a wave generated locally at the receiving terminal which when combined with the side bands in a suitable detector, produces the modulating wave.

<u>Carrier frequency</u>. The output of a transmitter when the modulating wave is made zero. Communication common carrier. Any person engaged in rendering communication service for hire to the public.

Control point. A control point is an operating position at which an operator responsible for the operation of the transmitter is stationed and which is under the control and supervision of the licensee.

Control station. A fixed station whose transmissions are used to control automatically the emissions or operations of another radio station at a specified location, or to transmit automatically to an alarm center telemetering information relative to the operation of such station.

Coordination distance. For the purpose of this part, the expression "coordination distance" means the distance from an earth station, within which there is a possibility of the use of a given transmitting frequency at this earth station causing harmful interference to stations in the fixed or mobile service, sharing the same band, or of the use of a given frequency for reception at this earth station receiving harmful interference from such stations in the fixed or mobile service.

Digital modulation. The process by which some characteristic (frequency, phase, amplitude or combinations thereof) of a carrier frequency is varied in accordance with a digital signal, e.g. one consisting of coded pulses or states.

Domestic fixed public service. A fixed service, the stations of which are open to public correspondence, for radiocommunications originating and terminating solely at points all of which lie within: (a) the State of Alaska, or (b) the State of Hawaii, or (c) the contiguous 48 States and the District of Columbia, or (d) a single possession of the United States. Generally, in cases where service is afforded on frequencies above 72 MHz, radio-communications between the contiguous 48 States (including the District of Columbia) and Canada or Mexico, or radiocommunications between the State of Alaska and Canada, are deemed to be in the domestic fixed public service.

Domestic public radio services. The land mobile and domestic fixed public services the stations which are open to public correspondence.

Note: Part 80 of this chapter is applicable to the maritime services and fixed stations associated with the maritime services; Part 87 is applicable to aeronautical services.

Earth station. A station in the space service located either on the earth's surface, including on board a ship, or on board an aircraft.

Effective radiated power. The product of the antenna power input and the antenna power gain. This product should be expressed in watts. (If specified for a particular direction, effective radiated power is based on the antenna power gain in that direction only.)

Equivalent Isotropically Radiated Power (EIRP). The product of the power supplied to the transmitting antenna and the antenna gain in a given direction relative to an isotropic antenna radiator. This product may be expressed in watts or dB above 1 watt (dBW).

Facsimile. A system of telecommunication for the transmission of fixed images with a view to their reception in a permanent form.

Fixed earth station. An earth station intended to be used at a specified fixed point.

Fixed station. A station at a fixed location.

Frequency tolerance. The maximum permissible variation of the carrier frequency expressed as a percentage or in Hertz.

Harmful interference. Any radiation or any induction which endangers the functioning of a radionavigation service or of a safety service or obstructs or repeatedly interrupts a radio service.

Microwave frequencies. As used in this part, this term refers to frequencies of 890 MHz and above.

Multichannel multipoint distribution service. Those multipoint distribution service channels that use the frequency band 2596 MHz to 2644 MHz and associated response channels.

Multipoint distribution service. A one-way domestic public radio service rendered on microwave frequencies from a fixed station transmitting (usually in an omnidirectional pattern) to multiple receiving facilities located at fixed points.

Multipoint distribution service response station. A fixed station operated at an MDS receive location to provide communications with the associated station in the Multipoint Distribution Service. <u>Necessary bandwidth of emission.</u> For a given class of emission, the width of the frequency band that is just sufficient to ensure the transmission of information at the rate and with the quality required under specified conditions.

Note: The necessary bandwidth for an emission may be calculated using the formulas in § 2.202 of this chapter.

<u>Private line service.</u> A service whereby facilities for communication between two or more designated points are set aside for the exclusive use or availability for use of a particular customer and authorized users during stated periods of time.

<u>Public correspondence.</u> Any telecommunication which the offices and stations, by reason of their being at the disposal of the public, must accept for transmission.

<u>Radio station.</u> A separate transmitter or a group of transmitters under simultaneous common control, including the accessory equipment required for carrying on a radiocommunication service.

Radiocommunication. Any telecommunication by means of hertzian waves.

Rated power output. The term "rated power output" of a transmitter means the normal radio frequency power output capability (Peak or Average Power) of a transmitter, under optimum conditions of adjustment and operation, specified by its manufacturer.

<u>Record communication.</u> Any transmission of intelligence which is reduced to visual record form at the point of reception.

<u>Reference frequency.</u> A frequency coinciding with or having a fixed and specified relation to the assigned frequency. This frequency does not necessarily correspond to any frequency in an emission.

Relay station. A fixed station used for the reception and retransmission of the signals of another station or stations.

Repeater station. A fixed station established for the automatic retransmission of radiocommunications received from one or more stations and directed to a specified receiver site.

<u>Signal booster station.</u> A low-power repeater station automatically retransmitting on the same frequency as the received signal, and located within the protected service area of a Multipoint Distribution Service station.

<u>Standby transmitter</u>. A transmitter installed and maintained for use in lieu of the main transmitter only during periods when the main transmitter is out of service for maintenance or repair.

<u>Symbol rate.</u> Modulation rate in bauds. This rate may be higher than the transmitted bit rate as in the case of coded pulses or lower as in the case of multilevel transmission.

<u>Television.</u> A system of telecommunication for transmission of transient images of fixed or moving objects.

<u>Television STL station (studio transmitter link).</u> A fixed station used for the transmission of television program material and related communications from a studio to the transmitter of a television broadcast station.

- 3. Section 21.3 is amended by deleting paragraph (b), and redesignating paragraph (c) as (b).
- 4. Section 21.6 is amended by revising paragraphs (b) and (c) to read as follows:
- § 21.6 Filing of applications, fees, and numbers of copies.

- (b) Applications requiring fees as set forth at part 1, subpart G of this chapter must be filed in accordance with Sec. 0.401(b) of this chapter. Applications not requiring fees shall be submitted to: Federal Communications Commission, Washington, DC 20554.
- (c) All correspondence or amendments concerning a submitted application shall clearly identify the radio service, the name of the applicant, station location, and the Commission file number (if

known) or station call sign of the application involved. All correspondence or amendments concerning a submitted application may be sent directly to the Common Carrier Bureau.

\* \* \* \* \*

5. Section 21.13 is amended by deleting paragraph (f), redesignating paragraph (g) as (f), and revising paragraphs (a)(6) and (b) to read as follows:

#### § 21.13 General application requirements.

(a) \* \* \*

- (6) Show compliance with the special requirements applicable to each radio service and make all special showings that may be applicable (<u>e.g.</u>, those required by Secs. 21.900, 21.912 and 21.913 of this part, etc.).
- (b) Applications may cross-reference previously filed material where documents, exhibits or other lengthy showings already on file with the Commission contain information which is required by an application form and may specifically refer to such information, if:

\* \* \* \* \*

6. Section 21.15 is amended by revising the introductory paragraph, and paragraphs (c), (d), and (g) to read as follows:

#### § 21.15 Technical content of applications.

Applications shall contain all technical information required by the application form and any additional information necessary to fully describe the proposed facilities and to demonstrate compliance with all technical requirements of the rules governing the radio service involved (see Subparts C, F and K as appropriate). The following paragraphs describe a number of technical requirements.

- (a) \* \* \*
- (b) \* \* \*
- (c) Each application involving a new or modified transmitting antenna supporting structure, passive facility, or signal booster station, the addition or removal of a transmitting antenna, or the repositioning of an authorized antenna for a station must be accompanied by a vertical profile sketch of the total structure depicting its structural nature and clearly indicating the ground elevation (above sea level) at the structure site, the overall height of the structure above ground (including obstruction lights when required, lightning rods, etc.) and, if mounted on a building, its overall height above the building. The proposed antenna on the structure must be clearly identified and its height above-ground (measured to the center of radiation) clearly indicated.
- (d) Each application proposing a new or modified antenna structure for a station (including a passive repeater or signal booster station) so as to change its overall height shall indicate whether any necessary notification of the FAA has been made. Complete information as to rules concerning the construction, marking and lighting of antenna structures is contained in Part 17 of this chapter. See also Sec. 21.111 if the structure is used by more than one station.
  - (e) \* \* \*
  - (f) \* \* \*
- (g) Each application in the Multipoint Distribution Service proposing a new or replacement directional antenna shall include an antenna radiation pattern showing the antenna power gain distribution in the horizontal plane expressed in decibels, unless such pattern is known to be on file with the Commission in which case the applicant may reference in its application the

FCC-ID number that indicates that the pattern is on file with the Commission.

- 7. Section 21.20 is amended by revising (b)(5) to read as follows:
- § 21.20 Defective applications.

\*\*\*\*

- (b) \* \* \*
- (5) The application does not certify the availability of the proposed station site.

\* \* \* \* \*

- 8. Section 21.23 is amended by deleting paragraphs (c)(1) and (d), redesignating (c)(2) through (c)(7) as (c)(1) through (c)(6), redesignating (e) through (g) as (d) through (f), and revising the newly redesignated paragraphs (c)(1) and (d)(1) to read as follows:
  - § 21.23 Amendment of applications.

\* \* \* \* \*

- (c) \* \* \*
- (1) If in the Multipoint Distribution Service, the amendment results in a substantial modification of the engineering proposal such as (but not necessarily limited to):

\* \* \* \* \*

- (d) \* \* \*
- (1) Any applicant whose application appears on its face to be mutually exclusive with the application being amended, including those applicants originally served under Sec. 21.902:

\* \* \* \* \*

- 9. Section 21.31 is amended by deleting paragraph (f), and revising paragraph (e)(3) to read as follows:
  - § 21.31 Mutually exclusive applications.

- (e) \* \* \*
- (3) The amendment reflects only a change in ownership or control found by the Commission to be in the public interest, and for which a requested exemption from the "cut-off" requirements of this section is granted, unless the amendment is for more than a <u>pro forma</u> change of ownership or control(bankruptcy, death or legal disability) of a pending Multipoint Distribution Service application in which event the application will be dismissed;

\* \* \* \* \*

- 10. Section 21.33 is amended by deleting paragraph (a), and redesignating paragraph (b) through (d) as (a) through (c).
  - 11. Section 21.39 is amended by revising paragraph (d)(3) to read as follows:
  - § 21.39 Considerations involving transfer or assignment applications.

\* \* \* \* \*

(d) \* \* \*

(3) The median date of the applicable commencement dates (determined pursuant to paragraphs (c) (1) and (2) of this section) if the transaction involves two or more stations. (The median date is that date so selected such that fifty percent of the commencement dates of the total number of stations, when arranged in chronological order, lie below it and fifty percent lie above it. When the number of stations is an even number, the median date will be a value half way between the two dates closest to the theoretical median).

\* \* \* \* \*

- 12. Section 21.41 is amended by revising paragraphs (b) and (c) to read as follows:
- § 21.41 Special processing of applications for minor facility modifications.

- (b) An application may be considered under the procedures of this section only if.
- It is in the Multipoint Distribution Service;
- (2) The cumulative effect of all such applications made within any 60 days period does not exceed the appropriate values prescribed by paragraph (c) of this section;
- (3) The facilities to be modified are not located within 56.3 kilometers (35 miles) of the Canadian or Mexican border;
- (4) It is acceptable for filing, is consistent with all of the Commission's rules, and does not involve a waiver request;
  - (5) It specifically requests consideration pursuant to this section; and
- (6) Frequency coordination procedures are complied with and a copy of the application has been served on those who also were served under Sec. 21.902.
  - (c) The modifications that may be authorized under the procedures of this section are:
- (1) Changes in a transmitter and existing transmitter operating characteristics, or protective configuration of transmitter, provided that:
- (i) In the Multipoint Distribution Service, any increase in EIRP is one and one-half dB or less over the previously-authorized power value.
- (ii) The necessary bandwidth is not increased by more than 10% of the previously authorized necessary bandwidth;
  - (2) Changes in the height of an antenna, provided that:
- (i) In Multipoint Distribution Service, any increase in antenna height is less than 3.0 meters (10 feet) above the previously authorized height; and
  - (ii) The overall height of the antenna structure is not increased as a result of the antenna

extending above the height of the previously authorized structure, except when the new height of the antenna structure is 6.1 meters (20 feet) or less (above ground or man-made structure, as appropriate) after the change is made.

- (3) Change in the geographical coordinates of a transmit station by ten seconds or less of latitude, longitude or both, provided that when notice to the FAA of proposed construction is required by Part 17 of the rules for antenna structure at the previously authorized coordinates (or will be required at the new location) the applicant must comply with the provisions of § 21.15(d).
  - (4) An increase in the number of Digital Termination user stations.

\* \* \* \* \*

- 13. Section 21.42 is amended by deleting paragraph (c)(7), redesignating paragraph (c)(8) as (c)(7), and revising paragraphs (b) and (c)(3) to read as follows:
  - § 21.42 Certain modifications not requiring prior authorization.

\* \* \* \* \*

- (b) Licensees of fixed stations in the Multipoint Distribution Service may make the facility changes listed in paragraph (c) of this section without obtaining prior Commission authorization, if:
- (1) The Multipoint Distribution Service licensee serves a copy of the notification described in (b)(3) on those who were served under Sec. 21.902, and
  - (2) \* \* \*
  - (3) \* \* \*
  - (c) \* \* \*
- (3) Change to an antenna (other than any change involving a periscope antenna system), when the new antenna conforms with Sec. 21.906 and the gain of the new antenna does not exceed that of the previously authorized antenna by more than one dB in any direction.

\* \* \* \*

- 14. Section 21.43 is amended by revising paragraph (a) to read as follows:
- § 21.43 Period of construction; certification of completion of construction.
- (a) Each license for a radio station for the services included in this Part shall specify as a condition therein the period during which construction of facilities will be completed and the station made ready for operation. Construction may not commence until the grant of a license, and must be completed by the date specified in the license as the termination date of the construction period. Except as may be limited by Sec. 21.45(b) or otherwise determined by the Commission for any particular application, the maximum construction period for all stations licensed under this Part shall be a maximum of 12 months from the date of the license grant.

\* \* \* \* \*

15. Section 21.45 is amended by revising paragraphs (a) and (c) to read as follows:

#### § 21.45 License period.

(a) Licenses for stations in the Multipoint Distribution Service will be issued for a period not to exceed 10 years, except that licenses for developmental stations will be issued for a period not to exceed one year. The expiration date of developmental licenses shall be one year from the date of the grant thereof. Unless otherwise specified by the Commission, the expiration of regular licenses shall be on the following date in the year of expiration.

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When a license is granted subsequent to the last renewal date of the class of license involved, the license shall be issued only for the unexpired period of the current license term of such class.

- (b) \* \* \*
- (c) Upon the expiration or termination of any station license, any related conditional authorization, which bears a later expiration date, shall be automatically terminated concurrently with the related station license, unless it shall have been determined by the Commission that the public interest, convenience or necessity would be served by continuing in effect said conditional authorization.
- 16. Section 21.100 is amended by deleting paragraphs (b) through (e) and deleting the "(a)" designation from the beginning of paragraph (a).
- 17. Section 21.101 is amended by deleting paragraph (b), redesignating paragraph (c) as (b), and revising paragraph (a) to read as follows:

#### § 21.101 Frequency tolerance.

(a) The carrier frequency of each transmitter authorized in these services shall be maintained within the following percentage of the reference frequency except as otherwise provided in paragraph (b) of this section or in the applicable subpart of this part (unless otherwise specified in the instrument of station authorization the reference frequency shall be deemed to be the assigned frequency):

Frequency range for fixed stations (percent)

2,150 to 2,162 /1/ /2/
2,500 to 2,686 /2/

Frequency tolerance for fixed stations (percent)

0.001

0.005

/1/ Beginning Aug. 9, 1975, this tolerance will govern the marketing of equipment pursuant to Sec 2.803 and 2.805 of this chapter and the issuance of all authorizations for new radio equipment. Until that date new equipment may be authorized with a frequency tolerance of .03 percent in the frequency range 2,200 to 10,500 MHz and equipment so authorized may continue to be used for its life provided that it does not cause interference to the operation of any other licensee. Equipment authorized in the frequency range 2,450 to 10,500 MHz prior to

June 23, 1969, at a tolerance of .05 percent may continue to be used until February 1, 1976 provided it does not cause interference to the operation of any other licensee.

/2/ Beginning November 1, 1991, equipment authorized to be operated in the frequency bands 2150-2162 MHz, 2596-2644 MHz, 2650-2656 MHz, 2662-2668 MHz, and 2674-2680 MHz for use in the Multipoint Distribution Service shall maintain a frequency tolerance within +/-1 KHz of the assigned frequency.

- 18. Section 21.106 is amended by deleting paragraphs (a)(3) and (a)(4).
- 19. Section 21.107 is amended by revising paragraph (b) to read as follows:

# § 21.107 Transmitter power.

\* \* \* \* \*

(b) The rated power of a transmitter employed in these radio services shall not exceed the values shown in the following tabulation:

Frequency Band (MHz)	Maximum allowable transmitter power for a fixed station (Watts)	Maximum allowable EIRP for a fixed station (dBW)
2,150 to 2,162	100.0	2000/1/
2,500 to 2,686	100.0	2000/1/

/1/ When a Multipoint Distribution Service station uses a non-omnidirectional antenna EIRP up to 7943 Watts may be authorized pursuant to Sec. 21.904(b) of this Part.

20. Section 21.108 is amended to read as follows:

#### § 21.108 Antennas.

Where a station communicates with more than one point, a multi- or omni-directional antenna may be authorized if necessary.

21. Section 21.109 is amended by revising paragraph (b) to read as follows:

#### § 21.109 Antenna and antenna structures.

- (b) The Commission may require the replacement, at the licensee's expense, of any antenna system of a permanent fixed station operating at 2500 MHz or higher upon a showing that said antenna causes or is likely to cause interference to any other authorized or proposed station.
- 22. Section 21.114 is amended by deleting the title and text, and designating the Section "[Reserved]" as follows:

#### § 21.114 [Reserved]

23. Section 21.119 is amended by deleting the title and text, and designating the Section "[Reserved]" as follows:

#### § 21.119 [Reserved]

24. Section 21.120 is amended by deleting paragraphs (d) and (e), and revising paragraph (a) to read as follows:

#### § 21.120 Authorization of transmitters.

(a) Except for transmitters used at developmental stations, each transmitter shall be a type which has been type accepted by the Commission for use under the applicable rules of this part.

\* \* \* \* \*

25. Section 21.122 is amended by deleting paragraphs (a)(2) through (a)(5), (d) and (e), and revising paragraph (a) to read as follows:

#### § 21.122 Microwave digital modulation.

(a) Microwave transmitters employing digital modulation techniques and operating below 15 GHz shall, with appropriate multiplex equipment, comply with the following additional requirement: The bit rate, in bits per second, shall be equal to or greater than the bandwidth specified by the emission designator in Hertz (e.g., to be acceptable, equipment transmitting at a 20 Mb/s rate must not require a bandwidth of greater than 20 MHz), except the bandwidth used to calculate the minimum rate shall not include any authorized guard band.

\*\*\*\*

- 26. Sections 21.212 through 21.214 are deleted.
- 27. Section 21.303 is amended by revising paragraphs (a) through (c) and (d)(1) to read as follows:

#### § 21.303 Discontinuance, reduction or impairment of service.

(a) If the public communication service provided by a station in the Domestic Public Radio Services is involuntarily discontinued, reduced or impaired for a period exceeding 48 hours, the station licensee shall promptly give notification thereof in writing to the Commission at Washington, DC 20554. In every such case, the licensee shall furnish full particulars as to the

reasons for such discontinuance, reduction or impairment of service, including a statement as to when normal service is expected to be resumed. When normal service is resumed, prompt notification thereof shall be given in writing to the Commission at Washington, DC 20554.

- (b) No station licensee subject to title II of the Communications Act of 1934, as amended, shall voluntarily discontinue, reduce or impair public communication service to a community or part of a community without obtaining prior authorization from the Commission pursuant to the procedures set forth in part 63 of this chapter or complying with the requirements set forth at Sec. 21.910. In the event that permanent discontinuance of service is authorized by the Commission, the station licensee shall promptly send the station license to the Commission for cancellation at Washington, DC 20554, except that Multipoint Distribution Service station licenses need not be surrendered for cancellation if the discontinuance is a result of a change of status by a Multipoint Distribution Service licensee from common carrier to non-common carrier pursuant to Sec. 21.910.
- (c) Any station licensee, not subject to title II of the Communications Act of 1934, as amended, who voluntarily discontinues, reduces or impairs public communication service to a community or a part of a community shall give written notification to the Commission within 7 days thereof. In the event of permanent discontinuance of service, the station licensee shall promptly send the station license to the Commission for cancellation at Washington, DC 20554, except that Multipoint Distribution Service station licenses need not be surrendered for cancellation if the discontinuance is a result of a change of status by a Multipoint Distribution Service licensee from non-common carrier to common carrier.
  - (d) \* \* \*
- (1) Submit for cancellation the station license (or licenses) to the Commission at Washington, DC 20554.

\* \* \* \* \*

28. Subpart G of Part 21 is revised by deleting the title, deleting Sections 21.500 through 21.512, and designating the Subpart "[Reserved]" as follows:

# Subpart G - [Reserved]

29. Subpart I of Part 21 is revised by deleting the title, deleting Sections 21.700 through 21.713, and designating the Subpart "[Reserved]" as follows:

#### Subpart I - [Reserved]

30. Subpart J of Part 21 is revised by deleting the title, deleting Sections 21.800 through 21.809, and designating the Subpart "[Reserved]" as follows:

#### Subpart J - [Reserved]

31. Section 21.901 is amended by revising paragraphs (a) and (e) to read as follows:

# § 21.901 Frequencies.

(a) Frequencies in the bands 2150-2162 MHz, 2596-2644 MHz, 2650-2656 MHz, 2662-2668 MHz, and 2674-2680 MHz are available for assignment to fixed stations in this service. Frequencies in the band 2150-2160 MHz are shared with non-broadcast omnidirectional radio systems licensed under other parts of the Commission's Rules, and frequencies in the band 2160-2162 MHz are shared with directional radio systems authorized